Enabling Access to Arctic Location Based Information - the Arctic SDI

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The Arctic SDI is focused on

- Facilitating access to geospatial information over the entire Arctic
  - to support social, economic, environmental, monitoring and decision-making in the Arctic
- Providing access to authoritative data, relevant thematic data and tools
- Working with Arctic stakeholders to expand and leverage from the SDI

Graphic Source: OGC
Data Providers and Stakeholders

- National Land Surveys
- International Hydrographic Organization / ARHC
  - Arctic Regional Marine SDI Working Group ARMSDIWG
- Polar Geospatial Data Center (Arctic DEM)
- Arctic Council Working Groups (CAFF, AMAP, EPPR, PAME)
- Global organizations, e.g. UN
- Academic institutions in the Arctic
- Public sector organizations
- Business, media, citizens, NGOs, …

AMI = Arctic Monitoring and Assessment Programme
CAFF = Conservation of Arctic Flora and Fauna
EPPR = Emergency Prevention, Preparedness and Response
PAME = Protection of the Arctic Marine Environment
Status of the Arctic SDI

Data content
- Joint base map of Arctic 1:250 000
- Searchable Circumpolar Gazetteer
- Support for Pan-Arctic DEM
- Thematic data from CAFF
- GEBCO bathymetry
- Other thematic data services

Technology & tools
- Metadata Catalogue – GeoNetwork
- Oskari-based Geoportal
  - Embedded maps, gazetteer search and other tools
- Delivery of an SDI Manual for the Arctic – Use of OGC standards
- Harvesting of Arctic spatial data services – Arctic 2030 program

Policy & framework
- 2015-2020 Strategic Plan
- Biennial report
- Arctic SDI governance plan
- Arctic SDI fact sheet
- Arctic SDI Geoportal fact sheet
- Key Performance Indicators (KPI)

Organization & Cooperation
- MoU between 8 mapping agencies in the Arctic
- Joint statement of intent with IHO working group ARMSDIWG
- Link to the Senior Arctic Officials of Arctic Council through CAFF
Data Resources

• Pan-Arctic Digital Elevation Map
• Marine Data
• Gazetteer Database and Search
• Arctic Reference Basemap
Arctic SDI provides an Authoritative Reference Basemap produced by the 8 Arctic National Mapping Agencies.
Pan-Arctic Gazetteer Search
Locations of sub-Arctic and Arctic shipping accidents and incident causes, 1995-2004

ABSTRACT TEXT (DATA)

Locations of sub-Arctic and Arctic shipping accidents and incident causes, 1995-2004 (source: Arctic Marine Shipping Assessment 2005).

Published in the Arctic Biodiversity Assessment (ABA) released in 2014.

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Visualization of Time Series
Embedded Map Tool
Embedded Map Example
Visualizing Statistical data - beta
Embedded map - UN SDG Indicator 7.2.1
Embedded map - UN SDG Indicator 14.5.1
In Summary, The Arctic SDI provides

• Access to Authoritative data across the Arctic
• Capacity building materials on principles of SDIs, how to bring your own data in and leverage from it
• Geoportal with Embedded maps, Time Series visualization and other tools to help Arctic stakeholders deliver and visualize their data to decisionmakers and other audiences
• Coming up: Tools to visualize statistical and spatial data, e.g. SDGs, over the Arctic to demonstrate the changing Arctic
arctic-sdi.org
geoportal.arctic-sdi.org
Arctic SDI Video:
https://youtu.be/tGS1rcaJRug